

Product datasheet for AR51036PU-N

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OriGene Technologies, Inc.

HSPA5 / GRP78 (19-654, His-tag) Human Protein

Product data:

Product Type: Recombinant Proteins

Description: HSPA5 / GRP78 (19-654, His-tag) human protein, 0.5 mg

Species: Human
Expression Host: E. coli

Expression cDNA Clone

or AA Sequence:

MGSSHHHHHH SSGLVPRGSH MGSEEEDKKE DVGTVVGIDL GTTYSCVGVF KNGRVEIIAN DQGNRITPSY VAFTPEGERL IGDAAKNQLT SNPENTVFDA KRLIGRTWND PSVQQDIKFL PFKVVEKKTK PYIQVDIGGG QTKTFAPEEI SAMVLTKMKE TAEAYLGKKV THAVVTVPAY FNDAQRQATK DAGTIAGLNV MRIINEPTAA AIAYGLDKRE GEKNILVFDL GGGTFDVSLL

FNDAQRQATK DAGTIAGLNV MRIINEPTAA AIAYGLDKRE GEKNILVFDL GGGTFDVSLL TIDNGVFEVV ATNGDTHLGG EDFDQRVMEH FIKLYKKKTG KDVRKDNRAV QKLRREVEKA

KRALSSQHQA RIEIESFYEG EDFSETLTRA KFEELNMDLF RSTMKPVQKV LEDSDLKKSD IDEIVLVGGS

TRIPKIQQLV KEFFNGKEPS RGINPDEAVA YGAAVQAGVL SGDQDTGDLV LLDVCPLTLG

IETVGGVMTK LIPRNTVVPT KKSQIFSTAS DNQPTVTIKV YEGERPLTKD NHLLGTFDLT GIPPAPRGVP QIEVTFEIDV NGILRVTAED KGTGNKNKIT ITNDQNRLTP EEIERMVNDA EKFAEEDKKL KERIDTRNEL ESYAYSLKNQ IGDKEKLGGK LSSEDKETME KAVEEKIEWL ESHQDADIED FKAKKKELEE IVQPIISKLY

GSAGPPPTGE EDTAEKDEL

Tag: His-tag

Predicted MW: 72.9 kDa

Concentration: lot specific

Purity: >90% by SDS - PAGE

Buffer: Presentation State: Purified

State: Liquid purified protein

Buffer System: 20 mM Tris-HCl buffer (pH 8.0) containing 0.15M NaCl, 20% glycerol, 1 mM

DTT

Preparation: Liquid purified protein

Storage: Store undiluted at 2-8°C for one week or (in aliquots) at -20°C to -80°C for longer. Avoid

repeated freezing and thawing.

Stability: Shelf life: one year from despatch.

RefSeq: NP 005338

Locus ID: 3309





UniProt ID: P11021

Cytogenetics: 9q33.3

Synonyms: 78 kDa glucose-regulated protein, Heat shock 70 kDa protein 5, BiP

Summary: The protein encoded by this gene is a member of the heat shock protein 70 (HSP70) family.

This protein localizes to the lumen of the endoplasmic reticulum (ER) where it operates as a typical HSP70 chaperone involved in the folding and assembly of proteins in the ER and is a master regulator of ER homeostasis. During cellular stress, as during viral infection or tumorogenesis, this protein interacts with the transmembrane stress sensor proteins PERK (protein kinase R-like endoplasmic reticulum kinase), IRE1 (inositol-requiring kinase 1), and ATF6 (activating transcription factor 6) where it acts as a repressor of the unfolded protein response (UPR) and also plays a role in cellular apoptosis and senescence. Elevated expression and atypical translocation of this protein to the cell surface has been reported in viral infections and some types of cancer cells. At the cell surface this protein may facilitate

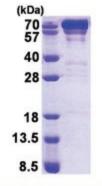
viral infections and some types of cancer cells. At the cell surface this protein may facilitate viral attachment and entry to host cells. This gene is a therapeutic target for the treatment of

coronavirus diseases and chemoresistant cancers. [provided by RefSeq, Jul 2020]

Protein Families: Druggable Genome

Protein Pathways: Antigen processing and presentation, Prion diseases

Product images:



15% SDS-PAGE (3ug)